UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,501	03/26/2004	Timothy P. Meier	283-315 CON	8167

20874 7590 04/21/2006

WALL MARJAMA & BILINSKI
101 SOUTH SALINA STREET
SUITE 400
SYRACUSE, NY 13202

EXAMINER	
COUSO, JOSE L	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/810,501	MEIER, TIMOTHY P.	
	Examiner	Art Unit	
	Jose L. Couso	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-10,15-18 and 22-25* is/are allowed.

6)☒ Claim(s) *11-13,19 and 20* is/are rejected.

7)☒ Claim(s) *14 and 21* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/27/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The request filed on January 27, 2006 for a Continued Examination (RCE) under 37 CFR 1.114 based on parent Application number 10/810,501, is acceptable and a RCE has been established. An action on the merits for the RCE follows.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 11-13 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu (U.S. Patent No. 6,012,640).

As to claims 11 and 19, Liu describes an image sensor and a control circuit (see figure 1, element 12 and refer for example to column 4, line 60 through column 5, line 12) for generating an array of multi-bit pixel values, the intensities of the pixel values defining a generally sinusoidal pattern and having a first set of max-min peaks proximate a transition region of the array that are attributable to bar space transitions of the array and a second set of max-min peaks superimposed on a major peak of the array that are attribute to noise (see figure , element and refer for example to column , lines 13-24 and column 8, lines 27-34); processing the array of multi-bit pixel values to

discriminate whether a certain set of max-min peaks therein are of the first set or the second set (refer for example to column 9, lines 26-67); and digitizing the certain set of max-min peaks conditionally on the condition that in the processing of the array of multi-bit values to discriminate max-min peaks it is determined that the certain set of max-min peaks is of the first set (refer for example to column 12, lines 10-24).

With regard to claims 12 and 20, Liu describes wherein the amplitudes of the first set of max-min peaks and the second set of max-min peaks have approximately the same magnitude (refer for example to column 9, lines 26-67).

In regard to claim 13, Liu describes wherein amplitudes of the first set of max-min peaks and the second set of max-min peaks have approximately the same value (refer for example to column 9, lines 26-67).

4. Claims 11-13 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Benedetti (U.S. Patent No. 6,834,806).

As to claims 11 and 19, Benedetti describes an image sensor and a control circuit (refer for example to column 1, lines 35-42) for generating an array of multi-bit pixel values, the intensities of the pixel values defining a generally sinusoidal pattern and having a first set of max-min peaks proximate a transition region of the array that are attributable to bar space transitions of the array and a second set of max-min peaks superimposed on a major peak of the array that are attribute to noise (refer for example to column 11, lines 29-34); processing the array of multi-bit pixel values to discriminate whether a certain set of max-min peaks therein are of the first set or the second set

(refer for example to column 13, lines 40-49); and digitizing the certain set of max-min peaks conditionally on the condition that in the processing of the array of multi-bit values to discriminate max-min peaks it is determined that the certain set of max-min peaks is of the first set (refer for example to column 15, lines 7-17).

With regard to claims 12 and 20, Benedetti describes wherein the amplitudes of the first set of max-min peaks and the second set of max-min peaks have approximately the same magnitude (refer for example to column 11, lines 29-34).

In regard to claim 13, Benedetti describes wherein amplitudes of the first set of max-min peaks and the second set of max-min peaks have approximately the same value (refer for example to column 11, lines 29-34).

5. Claims 1-10, 15-18 and 22-25 are allowed.

6. Claims 14 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith, Scott, Sherman, Ma et al. and Marchi et al. all disclose systems similar to applicant's claimed invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jose L. Couso whose telephone number is (571) 272-7388. The examiner can normally be reached on Monday through Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the USPTO contact Center whose telephone number is (703) 308-4357.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jlc
April 19, 2006

JOSE L. COUSO
PRIMARY EXAMINER